ABSTRACT

The reliability of a reception wave from a transducer is checked and when the reliability is determined to be insufficient, a method different from the current method is selected. The reliability is judged by calculating a value serving as an index of the reliability of the reception wave and checking whether the value is smaller than a predetermined set value. When the value is smaller than the set value, the reliability is judged to be insufficient. The values serving as an index of the reliability of the reception wave may be the amplitude of the reception wave, the ratio of the amplitude of the reception wave against a predetermined measurable amplitude value, the ratio of the power spectrum against a predetermined power value, the ratio of transmission wave amplitude against the maximum amplitude of the reception wave, the ratio of the power spectrum of the transmission frequency included in the reception wave and obtained by Fourier transform of the reception wave against a predetermined power value, and the like.